

***Remarks***

Reconsideration of this Application is respectfully requested.

Upon entry of the foregoing amendment, claims 1, 2, 6-13, 17-26 and 30-45 are pending in the application, with claims 1, 13, and 25 being the independent claims. Claims 1, 6, 7, 10-13, 17-19, 21-24, and 30-35 are sought to be amended. These changes do not change the scope of the claims, and are only made to correct matters of form. Applicants reserve the right to prosecute similar or broader claims, with respect to the cancelled and/or amended claims, in the future. These changes are believed to introduce no new matter, and their entry is respectfully requested.

The claims presented in this Application should be interpreted solely based on the file history of this Application, not the file history of any predecessor or related application. With respect to this application, Applicants hereby rescind any and all disclaimers of claim scope made in any parent application(s), any predecessor application(s), and any related application(s). The Examiner is advised that any previous disclaimer of claim scope, if any, and any references that allegedly caused any previous disclaimer of claim scope, may need to be revisited. Nor should any previous disclaimer of claim scope, if any, in this Application be read back into any predecessor or related application.

Based on the above amendment and the following remarks, Applicant respectfully requests that the Examiner reconsider all outstanding objections and rejections and that they be withdrawn.

***Statement of Substance of Interview***

Pursuant to 37 C.F.R. § 1.133, Applicant provides the following statement of substance of the interview. Applicant expresses their appreciation to Examiner Sai Ming Chan for the courtesy of a telephonic interview with Applicant's representatives on May 12, 2010. During the interview, Applicant's representatives and the Examiner discussed United States Patent Publication No. 2004/0244043 to Lind et al. ("Lind").

No agreement was reached between the Applicant's representatives and the Examiner during the interview. The Examiner invited the Applicant's representatives to submit their arguments to the Examiner in the next communication for further consideration.

***Rejections under 35 U.S.C. § 103***

Claims 1, 2, 6, 7, 9, 11, 12, 25, 26, 30, 31, 33, 35-37, 39, 40, 42, 43, and 45

Claims 1, 2, 6, 7, 9, 11, 12, 25, 26, 30, 31, 33, 35-37, 39, 40, 42, 43, and 45 stand rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over Lind in view of United States Patent Publication No. 2002/0136203 to Liva et al. ("Liva"). Applicant respectfully traverses the rejection and provides the following arguments to support patentability.

The invention as described and claimed in this Application teaches establishing of logical upstream channels to support future communication between a cable modem termination system (CMTS) and cable modems that implement one or more proprietary features. (Specification, ¶ [0047] - [0063].) These one or more proprietary features are not provided for, or permitted by, DOCSIS. (Specification, ¶ [0041].) The CMTS communicates with a cable modem to determine whether the cable modem supports

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proprietary features. (Specification, ¶ [0052].) If the cable modem supports proprietary features, then the CMTS gathers a list of the proprietary features from the cable modem. (Specification, ¶¶ [0052] - [0053].) The CMTS then uses the list to determine if the cable modem can be assigned to communicate via an existing logical channel that supports the proprietary features. (Specification, ¶ [0054].) If the cable modem cannot be assigned to an existing logical channel, the CMTS evaluates all currently registered cable modems (including the one not assigned) supporting the proprietary feature and determines if a new proprietary logical channel should be created for all currently registered cable modems that support the proprietary features. (Specification, ¶ [0054].) If so, the CMTS then creates the new proprietary logical channel when a number of the currently registered cable modems that support the proprietary features and that have not been placed into the existing logical channel ("unplaced cable modems") reaches a *predetermined number*. (Specification, ¶ [0054].) A new proprietary logical channel is not created for each possible proprietary communication parameter. Rather, the invention efficiently allocates bandwidth, by creating a new proprietary logical channel, only after there is a sufficient need, i.e., "*when a predetermined number of currently registered devices support said at least one proprietary communication parameter.*"

The Office Action correctly acknowledges that Lind does not specifically disclose suggests at least the feature of "*creating a new proprietary logical channel when a predetermined number of currently registered devices support said at least one proprietary communication parameter*" of independent claim 1. To cure this deficiency, the Office Action alleges Liva teaches or suggests these missing features such that a combination of Lind and Liva renders independent claim 1 obvious. However, as to be

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discussed below, Liva does not teach or suggest these missing features of independent claim 1; therefore, the combination of Lina and Liva does not render claim 1 obvious.

The Office Action cites to ¶ [0012] of Lind for allegedly disclosing "creating a new proprietary channel" (Office Action, p. 4.). This passage of Lind provides:

The aforementioned manual configurations of cabling and channel adjustments have been necessary at initial installation and often many times thereafter. Node recombining (e.g., manual recabling to pair a new logical channel with a new line card) has often been necessary whenever an *existing subscriber channel reaches capacity and additional channels need to be assigned*. Manual channel reprovisioning has also been frequently necessary to avoid various sources of ingress noise, which varies both in time and channels affected.

(Lind, ¶ [0012].)

This passage discloses "*whenever subscriber channel reaches capacity and additional channels need to be assigned*." The subscriber channel reaching capacity, the condition for creating a new channel, as discussed by Lind relates to the amount of information that can be reliably transmitted over the subscriber channel.

However, Lind's condition for creating a new channel does not teach or suggest Applicant's condition for creating a new proprietary logical channel as exemplified in independent claim 1, namely "*when a predetermined number of currently registered devices support said at least one proprietary communication parameter*." This feature of independent claim 1 does not create a new proprietary logical channel when the existing proprietary logical channels reach capacity as disclosed by Lind. Rather, this feature of independent claim 1 creates a new proprietary logical channel when a predetermined number of currently registered devices support a specific proprietary communication parameter. In other words, independent claim 1 only creates the new proprietary logical channel when a predetermined number of currently registered devices, each supporting

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the specific proprietary communication parameter, requires a new proprietary logical channel to allow for efficiently allocation of bandwidth.

Further, the Examiner, in the "Response to Arguments" section in the Office Action, characterizes Applicant's arguments as presented in the Submission Under 37 C.F.R. § 1.114(c) and Preliminary Amendment Under 37 C.F.R. § 1.115 ("Submission"), filed on February 16, 2010, as basically arguing that "Liva does not teach or suggest 'creat[ing] a new channel and assign[ing] logical channels.'" (Office Action, p. 11.) However, this characterization of Applicant's arguments is incorrect. Applicant argued in the Submission, as is done in this communication, that Liva does not teach or suggest at least the feature of *"creating a new proprietary logical channel when a predetermined number of currently registered devices support said at least one proprietary communication parameter."* (Submission, pp. 16- 17.) Applicant has not presented arguments in the Submission or in this communication that Lind does not teach or suggest "creat[ing] a new channel and assign[ing] logical channels." Rather, Applicant has once again presented arguments that Lind does not teach or suggest Applicant's condition for creating a new logical channel, namely, *"when a predetermined number of currently registered devices support said at least one proprietary communication parameter."*

In summary, Liva fails to cure the deficiencies of Lind as alleged in the Office Action. Independent claim 25 recites substantially similar features that are likewise not taught or suggested by the combination of Lind and Liva. Consequently, the combination of Lind and Liva does not render independent claims 1 and 25 obvious. Dependent claims 2, 6, 7, 9, 11, 12, 26, 30, 31, 33, 35-37, 39, 40, 42, 43, and 45 are likewise not rendered obvious by the combination of Lind and Liva for the same reasons

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as the independent claims from which they respectively depend and further in view of their own respective features. Accordingly, Applicant respectfully requests that the rejection of claims 1, 2, 6, 7, 9, 11, 12, 25, 26, 30, 31, 33, 35-37, 39, 40, 42, 43, and 45 under 35 U.S.C. § 103(a) be reconsidered and withdrawn.

Claims 8, 10, 13, 17-24, 32, 34, 38, 41, and 44

Claims 8, 10, 13, 17-24, 32, 34, 38, 41, and 44 stand rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over Lind in view of Liva and in further view of one or more of the following:

United States Publication Patent No. 2005/0025145 to Rakib et al.  
("Rakib"); and

United States Publication Patent No. 2004/000863 to Cloonan et al.  
("Cloonan").

Applicant respectfully traverses the rejection and provides the following arguments to support patentability.

From the discussion above, the combination of Lind and Liva does teach or suggest each and every feature of independent claims 1 and 25. Independent claim 13 recites substantially similar features as independent claim 1 that are likewise not taught or suggested by the combination of Lind and Liva. Rakib or Cloonan alone, or any combination thereof, does not provide the missing teachings or suggestions with respect to independent claims 1, 13, and 25 nor does the Office Action so allege. Therefore, the combination of Lind, Liva, and one or more of Rakib and Cloonan does not render these independent claims obvious. Dependent claims 8, 10, 17-24, 32, 34, 38, 41, and 44 are likewise not rendered obvious by the combination of Lind, Liva, and one or more of Rakib and Cloonan for the same reasons as the independent claims from which they

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respectively depend and further in view of their own respective features. Accordingly, Applicant respectfully requests that the rejection of claims 8, 10, 13, 17-24, 32, 34, 38, 41, and 44 under 35 U.S.C. § 103(a) be reconsidered and withdrawn.

### ***Conclusion***

All of the stated grounds of objection and rejection have been properly traversed, accommodated, or rendered moot. Applicant therefore respectfully requests that the Examiner reconsider all presently outstanding objections and rejections and that they be withdrawn. Applicant believes that a full and complete reply has been made to the outstanding Office Action and, as such, the present application is in condition for allowance. If the Examiner believes, for any reason, that personal communication will expedite prosecution of this application, the Examiner is invited to telephone the undersigned at the number provided.

Prompt and favorable consideration of this Amendment and Reply is respectfully requested.

Respectfully submitted,

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